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PATENT APPLICATION

ATTORNEY DOCKET NO. 200315123-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Susie Wee et al.

Confirmation No.: 8755

Application No.: 10/682,542

Examiner: Bautista X.

Filing Date: 10-9-2003

Group Art Unit: 2179

Title: COMMUNICATION AND COLLABORATION SYSTEM USING RICH MEDIA ENVIRONMENTS

Mail Stop Appeal Brief-Patents
Commissioner For Patents
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Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 10-11-07.

☒ The fee for filing this Appeal Brief is \$510.00 (37 CFR 41.20).

☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month
\$120

☐ 2nd Month
\$460

☐ 3rd Month
\$1050

☐ 4th Month
\$1640

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time:

Please charge to Deposit Account 08-2025 the sum of \$ 510. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

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Respectfully submitted,

Susie Wee et al.

By Paul H. Horstmann

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Susie Wee et al.

Application No: 10/682,542

Filed: 10-9-03

For: COMMUNICATION AND
COLLABORATION SYSTEM USING
RICH MEDIA ENVIRONMENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner: Bautista X..

Art Unit: 2179

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Date

Appellant's Brief (Pursuant to 37 C.F.R. §41.37)

Dear Sir:

Appellant/ Appellant submits this Appeal Brief in connection with the
above-referenced patent application which is on appeal to the Board of Patent
Appeals and Interferences.

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REAL PARTY IN INTEREST

The real party in interest in this application is Hewlett-Packard Development Company, L.P.

RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any other related appeals or interferences that may directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

STATUS OF THE CLAIMS

Claims 1-45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application 2003/0001890 of *Brin* ("*Brin*") and U.S. Patent No. 5,686,957 of Baker ("*Baker*") and U.S. Patent Application 2004/0172252 of *Aoki et al.* ("*Aoki*").

Appellant appeals the rejection of all of the pending claims 1-45. Claims 1-45 as currently pending are set forth in the attached Appendix.

STATUS OF AMENDMENTS

Appellant is unaware of any amendments filed after the Final Office Action mailed 7-11-07 which finally rejected claims 1-45.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 22, and 34 are directed to enabling multiple communications interactions, e.g. multiple side groups, to form among multiple individuals that are physically present in different environments by using respective sets of sensing and rendering components in the environments to detect the communication interactions and then capturing and combining the media data for the sensing and rendering components in response to the activities of the individuals associated with the respective communication interactions. (See pages 1-2 of Appellant's specification).

Independent claim 1 is a system for communication including a first set of sensing and rendering components arranged to cover physical movements of multiple individuals present in a first environment (See Figure 5, element 250 and pages 15-16 of Appellant's specification) and a second set of sensing and rendering components arranged to cover physical movements of multiple individuals present in a second environment (See Figure 5, element 252 and pages 15-16 of Appellant's specification). A system according to claim 1 includes an interest thread detector (See Figure 1, element 16 and page 5 of Appellant's specification) that uses the first and second set of sensing and rendering components to detect multiple communication interactions each involving a respective subset of the individuals present in the first and second environments (See Figure 1, element 16 and page 5, last paragraph of Appellant's specification) and that maintains an interest thread for each communication interaction (See Figure 1, element 16 and page 5, last paragraph of Appellant's specification) and further includes a communication provider (See Figure 1, element 18 and page 6, first paragraph of Appellant's specification) that captures a set of media data from the sensing components and that combines the captured media data in response to the respective activities of each subset of the individuals (See Figure 2, element 36 and page 6, fourth paragraph of Appellant's specification) and that communicates the combined media data to the rendering components (See Figure 2, element 38 and page 6, fourth paragraph of Appellant's specification).

Independent claim 22 is directed to a method for communication that includes providing a first set of sensing and rendering components for covering physical movements of multiple individuals present in a first

environment (See Figure 5, element 250 and pages 15-16 of Appellant's specification) and providing a second set of sensing and rendering components for covering physical movements of multiple individuals present in a second environment (See Figure 5, element 252 and pages 15-16 of Appellant's specification). A method according to claim 22 further includes detecting multiple communication interactions each a communication interaction involving a respective subset of the individuals present in the first and second environments (See Figure 2, element 30 and page 6, second paragraph of Appellant's specification) and maintaining an interest thread for the each detected communication interaction (See Figure 2, element 32 and page 6, second paragraph of Appellant's specification) and capturing a set of media data from the sensing components (See Figure 2, element 34 and page 6, fourth paragraph of Appellant's specification) and combining the captured media data in response to the respective activities of the respective subset of the individuals (See Figure 2, element 36 and page 6, fourth paragraph of Appellant's specification) and communicating the combined media data to the rendering components (See Figure 2, element 38 and page 6, fourth paragraph of Appellant's specification).

Independent claim 34 is directed to a computer-readable storage media that includes providing a first set of sensing and rendering components for covering physical movements of multiple individuals present in a first environment (See Figure 5, element 250 and pages 15-16 of Appellant's specification) and providing a second set of sensing and rendering components for covering physical movements of multiple individuals present in a second environment (See Figure 5, element 252 and pages 15-16 of Appellant's specification). A method according to claim 22 further includes detecting multiple communication interactions each a communication interaction involving a respective subset of the individuals present in the first and second environments (See Figure 2, element 30 and page 6, second paragraph of Appellant's specification) and maintaining an interest thread for the each detected communication interaction (See Figure 2, element 32 and page 6, second paragraph of Appellant's specification) and capturing a set of media data from the sensing components (See Figure 2, element 34 and page 6, fourth paragraph of Appellant's specification) and combining the captured

media data in response to the respective activities of the respective subset of the individuals (See Figure 2, element 36 and page 6, fourth paragraph of Appellant's specification) and communicating the combined media data to the rendering components (See Figure 2, element 38 and page 6, fourth paragraph of Appellant's specification).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

I: Rejection of claims 1-45 as being obvious in view of *Brin* and *Baker* and *Aoki*.

ARGUMENT

I: Claims 1-45 are not obvious in view of *Brin* and *Baker* and *Aoki* because *Brin* and *Baker* and *Aoki* do not disclose or suggest the limitations of independent claims 1, 22, and 34.

Appellant respectfully submits that independent claims 1, 22 and 34, and claims 2-21, 23-33, and 35-45 which depend from independent claims 1, 22 and 34, are not obvious in view of *Brin* and *Baker* and *Aoki* because *Brin* and *Baker* and *Aoki* do not disclose or suggest using respective sets of sensing and rendering components to detect multiple communication interactions among multiple individuals that are physically present in a first and a second environment as claimed in independent claims 1, 22 and 34. Appellant also submits that *Brin* and *Baker* and *Aoki* do not disclose or suggest capturing and combining media data in response to the activities of the individuals associated with the respective detected communication interactions as claimed in independent claims 1, 22 and 34.

A: *Brin* and *Baker* and *Aoki* do not disclose or suggest using respective sets of sensing and rendering components to detect multiple communication interactions among multiple individuals physically present a first and a second environment as claimed in independent claims 1, 22, and 34.

Appellant respectfully submits that *Brin* and *Baker* and *Aoki* do not disclose or suggest using respective sets of sensing and rendering components to detect multiple communication interactions among multiple individuals that are physically present in a first and a second environment as claimed in claims 1, 22 and 34. Instead, *Brin* discloses an online chat system that uses movements of icons inside of computer system display windows to detect communication interactions (*Brin*, Figures 1-16 and paragraphs 82-120) and *Baker* discloses steering a video camera toward an individual that is speaking (*Baker*, Abstract and col. 5, lines 32-37) and *Aoki* discloses identifying a conversation among a set of individuals positioned at their computers (*Aoki*, Figure 1 and paragraph 11).

The examiner has stated that *Brin* and *Baker* taken together disclose using sensing and rendering components to detect multiple communication interactions among multiple individuals present in a first and a second environment because the system of *Brin* enables users to participate in multiple “real-world” conversations¹ (page 2, Office Action, 7-11-07) and because *Baker* discloses sensing and rendering components for covering the physical movements of multiple individuals that are present in an environment (page 3, Office Action, 7-11-07).

It is respectfully submitted that the examiner has lifted the term “real-world” from *Brin* in attempt to show that the teachings of *Brin* are applicable to communication interactions that occur in among individuals that are physically present in a first and a second environment as claimed in claims 1, 22 and 34. In truth, *Brin* only uses the term “real-world” to denote those conversational characteristics that occur normally in the physical world. (*Brin*, paragraph 11). The online chat system of *Brin* itself does not detect those conversational characteristics in a physical environment but instead uses a

computer program to emulate those conversational characteristics using moveable icons in a window on a display screen of a computer terminal. (*Brin*, paragraphs 12 and 82). Paragraphs 1-250 of *Brin* clearly describe an online chat system in which users seated at computer terminals are represented as icons in a window on a display screen and in which communication interactions are detected by detecting the movements of the icons within the window.

It is further submitted that one of skill in the art would not combine *Baker* with *Brin* as suggested by the examiner because the teaching in *Baker* of steering a video camera toward a physical location of an individual is incompatible with the online chat system of *Brin*. It is submitted that in an online virtual chat system as taught by *Brin* determining the physical location of an individual as taught by *Baker* is irrelevant. It is submitted that the examiner is clearly engaging in an impermissible hindsight reconstruction of appellant's invention by attempting to throw together incompatible pieces of prior art.

¹ The examiner has actually stated that *Brin* enables users to perceive and participate in "a multiple real-world conversational characteristics." It is submitted that the examiner means multiple real-world conversations.

B: *Brin* and *Baker* and *Aoki* do not disclose or suggest capturing and combining media data in response to the activities of the individuals associated with the respective detected communication interactions as claimed in independent claims 1, 22, and 34.

Appellant respectfully submits that *Brin* and *Baker* and *Aoki* do not disclose or suggest capturing and combining media data in response to the activities of the individuals associated with the respective detected communication interactions as claimed in claims 1, 22 and 34. This follows from the fact that *Brin* and *Baker* and *Aoki* do not disclose or suggest detecting multiple communication interactions as claimed in claims 1, 22 and 34 and so *Brin* and *Baker* and *Aoki* cannot respond to the activities of the individuals involved in the detected communication interactions.

CONCLUSION

Appellant respectfully submits that the stated rejections cannot be maintained in view of the arguments set forth above. Appellant respectfully submits that all of the claims 1-45 are patentable under 35 U.S.C. §103 over the references cited by the Examiner and requests that the Board of Patent Appeals and Interferences direct allowance of the rejected claims.

Respectfully submitted,

By

Date: 12-11-87

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CLAIMS APPENDIX

1. A system for communication, comprising:
 - first set of sensing and rendering components arranged to cover physical movements of multiple individuals present in a first environment;
 - second set of sensing and rendering components arranged to cover physical movements of multiple individuals present in a second environment;
 - interest thread detector that uses the first and second set of sensing and rendering components to detect multiple communication interactions each involving a respective subset of the individuals present in the first and second environments and that maintains an interest thread for each communication interaction;
 - communication provider that captures a set of media data from the sensing components and that combines the captured media data in response to the respective activities of each subset of the individuals and that communicates the combined media data to the rendering components.
2. The system of claim 1, wherein the communication provider selects a respective subset of the first and second set of sensing and rendering components for use for each interest thread.
3. The system of claim 1, wherein the respective activities include speech levels of the individuals involved in the respective interest thread.
4. The system of claim 1, wherein the respective activities include gestures by the individuals involved in the respective interest thread.
5. The system of claim 1, wherein the respective activities include movements by the individuals involved in the respective interest thread.
6. The system of claim 1, wherein the respective activities include locations of the individuals involved in the respective interest thread.

7. The system of claim 1, wherein the communication provider refines the media data obtained from the sensor components in response to the respective activities.
8. The system of claim 1, wherein the communication provider stores the combined media data to provide a history of each communication interaction.
9. The system of claim 1, wherein the communication interactions include a communication interaction pertains to an artifact in one of the environments.
10. The system of claim 9, wherein the artifact changes over time.
11. The system of claim 9, wherein the artifact is a shared virtual writing surface.
12. The system of claim 10, wherein a change to the artifact is made by one of the individuals involved in the interest threads.
13. The system of claim 10, wherein the communication provider records a history of the artifact over time.
14. The system of claim 1, wherein the interest thread detector detects one or more activities in the environments and creates an interest area for the detected activity.
15. The system of claim 14, wherein the interest thread detector associates the interest area with another interest thread.
16. The system of claim 1, wherein the communication interactions include a communication interaction that involves two or more of the individuals in one of the environments.

17. The system of claim 1, wherein the communication interactions include a communication interaction that involves one or more of the individuals in two of the environments.

18. The system of claim 1, wherein the interest thread detector detects formation by detecting a movement of one of the individuals.

19. The system of claim 18, wherein the movement pertains to one of the rendering devices.

20. The system of claim 18, wherein the movement pertains to one of the other individuals.

21. The system of claim 1, wherein one or more of the individuals is in a remote location and in possession of a remote sensing and rendering component.

22. A method for communication, comprising:
 providing a first set of sensing and rendering components for covering physical movements of multiple individuals present in a first environment;
 providing a second set of sensing and rendering components for covering physical movements of multiple individuals present in a second environment;
 detecting multiple communication interactions each a communication interaction involving a respective subset of the individuals present in the first and second environments;
 maintaining an interest thread for the each detected communication interaction;
 capturing a set of media data from the sensing components;
 combining the captured media data in response to the respective activities of the respective subset of the individuals;
 communicating the combined media data to the rendering components.

23. The method of claim 22, further comprising selecting a respective subset of the sensing and rendering components for use for each interest thread.
24. The method of claim 22, wherein combining the captured media data includes detecting speech levels of the corresponding individuals.
25. The method of claim 22, wherein combining the captured media data includes detecting gestures by the corresponding individuals.
26. The method of claim 22, wherein combining the captured media data includes detecting movements by the corresponding individuals.
27. The method of claim 22, wherein combining the captured media data includes detecting locations of the corresponding individuals.
28. The method of claim 22, further comprising refining the media data obtained from the sensor components in response to the respective activities.
29. The method of claim 22, further comprising storing the combined media data in a history of each communication interaction.
30. The method of claim 22, further comprising monitoring an artifact over time.
31. The method of claim 30, further comprising recording a history of the artifact over time.
32. The method of claim 22, further comprising detecting one or more activities in the environments and creating an interest area for each detected activity.
33. The method of claim 32, further comprising associating the interest area with another interest thread.

34. A computer-readable storage media that contains a set of code that when executed provides communication by:

- providing a first set of sensing and rendering components for covering physical movements of multiple individuals present in a first environment;

- providing a second set of sensing and rendering components for covering physical movements of multiple individuals present in a second environment;

- detecting multiple communication interactions each involving a respective subset of the individuals present in the first and second environments;

- maintaining an interest thread for each detected communication interaction;

- capturing a set of media data from the sensing components;

- combining the captured media data in response to the respective activities of the respective subset of the individuals;

- communicating the combined media data to the rendering components.

35. The computer-readable storage media of claim 34, further comprising selecting a respective subset of the sensing and rendering components for use for each interest thread.

36. The computer-readable storage media of claim 34, wherein combining the captured media data includes detecting speech levels of the corresponding individuals.

37. The computer-readable storage media of claim 34, wherein combining the captured media data includes detecting gestures by the corresponding individuals.

38. The computer-readable storage media of claim 34, wherein combining the captured media data includes detecting movements by the corresponding individuals.

39. The computer-readable storage media of claim 34, wherein combining the captured media data includes detecting locations of the corresponding individuals.

40. The computer-readable storage media of claim 34, further comprising refining the media data obtained from the sensor components in response to the respective activities.

41. The computer-readable storage media of claim 34, further comprising storing the combined media data in a history of each communication interaction.

42. The computer-readable storage media of claim 34, further comprising monitoring an artifact over time.

43. The computer-readable storage media of claim 42, further comprising recording a history of the artifact over time.

44. The computer-readable storage media of claim 34, further comprising detecting one or more activities in the environments and creating an interest area for each detected activity.

45. The computer-readable storage media of claim 44, further comprising associating the interest area with another interest thread.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.